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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,475	03/26/2004	Michael W. Frauens	H10317/DPS	9797
1333 7590 08/01/2008 EASTMAN KODAK COMPANY PATENT LEGAL STAFF 343 STATE STREET ROCHESTER, NY 14650-2201			EXAMINER LABOMBARD, RUTH NAOMI	
			ART UNIT 2852	PAPER NUMBER
			MAIL DATE 08/01/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/810,475

Applicant(s)

FRAUENS ET AL.

Examiner

RUTH N. LABOMBARD

Art Unit

2852

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 2, 5, 7, 8, 12, 23-45 and 47-50 is/are pending in the application.
- 4a) Of the above claim(s) 31-44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 7, 8, 12, 23-30, 45 and 47-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The objections to the specification are withdrawn in light of the amendments received on 3/31/08. However, the last sentence of the previously submitted amendments to the specification remains objected to and should indicate Figure 1a, not Figure 1.

Claim Objections

2. The objections to the claims in the Office action mailed on 12/18/07 have been withdrawn in light of the amendments received on 3/31/08.

3. Claims 1, 23, 28, 45 and 50 are objected to because of the following informalities:

- a. Claim 1, lines 16 and 17: It is suggested that "the first toning station partially overlaps in a direction perpendicular to the receiver transport path with the second station" be changed to "the first toning station partially overlaps the second station in a direction perpendicular to the receiver transport path"
- b. Claim 1, line 17: "the second station" should be changed to "the second toning station"
- c. Claim 1, line 20: "a receiver" should be changed to "the print medium receiver"
- d. Claim 1, lines 10 and 11: the amended "first toning roller" and "first rotating magnetic core" of the second toning station should be amended to improve the clarity of the claim. A first toning roller and first rotating magnetic

core exist in the first toning station. The "first toning roller" and "first rotating magnetic core" of the first and second toning stations may be easily mistaken for the other and therefore it is suggested that the two components of the second toning station be renamed to avoid confusion.

e. Claim 23, lines 12 and 13: "a receiver print medium receiver" should be changed to "a print medium receiver"

f. Claim 28, line 10: "toning staion s" should be corrected to read "toning stations"

g. Claim 45, line 13: "in anextended width area" should be changed to "in an extended width area"

h. Claim 50 depends from a cancelled claim and is being treated as a dependent of claim 1.

i. Claim 50, line 2: "one or both toning station" should be changed to "one or both toning stations"

j. Claim 50, lines 2 and 3: "relative amounts of toner is" should be changed to "relative amounts of toner are"

Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 1, 2, 5, 7, 12, 23 and 50 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Desie et al. (US 6,246,424 B1) in view of Kaukeinen et al. (JP

07043978 A) as presented in the Office action mailed on 12/18/07. Claims 1, 5, 12 and 23 have been amended.

3. Claim 1 has been amended to indicate that a first rotating magnetic core (previously claimed) is "for forming a magnetic brush" and that the first toning roller (previously claimed) is for "applying the magnetic brush." Figure 5 clearly discloses a magnetic core for forming a magnetic brush and a toning roller for applying the magnetic brush. Claim 1 has been additionally amended to indicate that "the first toning station partially overlaps in a direction perpendicular to the receiver transport path with the second station. Figure 4 clearly discloses a first and second toning station (1043, 1045) partially overlapping in a direction perpendicular to the receiver transport path.

4. Claim 5 has merely been amended to indicate that the print medium receiver is located in the print medium receiver path. Claim 5 remains rejected as indicated in the Office action mailed on 12/18/07.

5. Claim 12 has merely been amended to rename the printer to be called a "powder deposition device," and therefore the rejection of claim 12 stands as presented in the Office action mailed on 12/18/07.

6. Claim 23 has been amended to indicate that a rotating magnetic core (previously claimed) is "for forming a magnetic brush." Figure 5 clearly discloses a magnetic core for forming a magnetic brush. Claim 23 has been additionally amended to indicate that the first and second sets of toning stations deposit toner on "both an extended width area and a same area of a receiver print medium receiver." As depicted in figure 4,

clearly the toning stations cover an extended width area beyond the center of the print medium receiver path as well as an overlapping area on the print medium receiver path.

7. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desie et al. in view of Costrop et al. (US 5,848,339) and further in view of Kaukeinen et al. (JP 07043978 A).
8. Desie et al., as described in the previous Office action, appear to differ from the instant invention by failing to include a third and fourth toning station.
9. Costrop et al. disclose a third and fourth toning station in figure 1 for producing a multicolor duplex image.
10. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Desie et al. to include a third and fourth toning station in order to for a multicolor duplex image.
11. Desie et al. appear to further differ from the instant invention by failing to disclose using a rotating magnetic core. Desie et al. disclose preferentially using a stationary magnetic core (column 11, lines 23-25) but does not provide a reason that this arrangement is preferred.
12. Kaukeinen et al. ('978) disclose using a rotating magnetic core, in a developing device, in order to develop a high-density image free from scavenging.
13. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Desie et al. ('424) to include a rotating magnetic core, as

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disclosed by Kaukeinen et al. ('978), in order to develop a high-density image free from scavenging.

14. Claim 1 has been amended to indicate that a first rotating magnetic core (previously claimed) is "for forming a magnetic brush" and that the first toning roller (previously claimed) is for "applying the magnetic brush." Costrop et al. disclose developer units are of a type generally referred to in the art as "magnetic brush development units" (column 6, lines 41 and 42). Claim 1 has been additionally amended to indicate that "the first toning station partially overlaps in a direction perpendicular to the receiver transport path with the second station." Figure 1 clearly depicts four toning stations (35, 36, 37, 38) overlapping in a direction perpendicular to the receiver transport path.

15. Claim 8 has merely been amended to indicate that the print medium receiver is located in the print medium receiver path. Claim 8 remains rejected as indicated in the Office action mailed on 12/18/07.

16. Claims 23-27 and 30 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Rushing (US 6,671,052 B1) in view of Kaukeinen et al. (JP 07043978 A) as presented in the Office action mailed on 12/18/07. Claim 23 has been amended to indicate that a rotating magnetic core (previously claimed) is "for forming a magnetic brush." Kaukeinen discloses a rotating magnetic sleeve for producing a magnetic brush and thus reads on the amended limitations. Claim 23 has been additionally amended to indicate that the first and second sets of toning stations deposit toner on "both an

extended width area and a same area of a receiver print medium receiver." Rushing discloses a wide-format machine in column 6, line 27.

17. Claims 23, 28, 29, 45 and 47-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Desie et al. (US 6,246,424 B1) in view of Nakazato (US 6,483,997 B1) and further in view of Kaukeinen et al. (JP 07043978 A). Claims 23 and 45 have been amended to indicate that a rotating magnetic core (previously claimed) is "forming a magnetic brush." Claims 23 and 45 have been additionally amended to indicate that the first and second sets of toning stations deposit toner on "both an extended width area and a same area of a receiver print medium receiver."

18. Desie et al., as described in the previous Office action, appear to differ from the instant invention by failing to disclose measuring a deposited amount of toner and adjusting a toning bias to control the application of toner.

19. Nakazato discloses controlling an electrifying bias and development bias according to a detected toner density (column 2, lines 10-33).

20. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Desie et al. to include density detection and bias adjustment operations in order to provide an optimal toner density and accordingly better image quality.

21. Desie et al. appear to further differ from the instant invention by failing to disclose using a rotating magnetic core. Desie et al. disclose preferentially using a stationary

magnetic core (column 11, lines 23-25) but does not provide a reason that this arrangement is preferred.

22. Kaukeinen et al. ('978) disclose using a rotating magnetic core, in a developing device, in order to develop a high-density image free from scavenging.

23. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify Desie et al. ('424) to include a rotating magnetic core, as disclosed by Kaukeinen et al. ('978), in order to develop a high-density image free from scavenging.

Response to Arguments

24. Applicants argue the "Desie, et al. reference shows a single toning roller having overlapping areas provided with toner, this in no way can provide for a wider development zone than the given width of the single toning roller (emphasis original)." Contrary to Applicants' argument Desie et al. clearly disclose multiple toning rollers in figure 4. Furthermore, Applicants argue that the invention of Desie et al. can not provide a wider development zone than the given width of the single toning roller however figure 4 of Desie et al. clearly depicts a plurality of toning rollers which develop an area greater than the width of one such toning roller.

25. Applicants argue Kaukeinen et al., Costrop et al., and Nakazato "only develop images directly in line in the receiver transport path. They provide no teaching that could be used to suggest the combination with Desie, et al. to extend the width of the development zone." Kaukeinen et al. provide a rotating magnetic core for developing a high-density image free from scavenging. Contrary to Applicants' argument Desie et al.

can clearly be modified Kaukeinen et al. for the purpose of forming an image free from scavenging. Costrop et al. disclose a third and fourth toning station for producing a multicolor duplex image. Contrary to Applicants' arguments Desie et al. can clearly be modified by Costrop et al. for the purpose of producing a multicolor duplex image. Nakazato discloses controlling an electrifying bias and development bias according to a detected toner density. Contrary to Applicants' argument Desie et al. can clearly be modified by Nakazato for the purpose of controlling an electrifying bias and development bias according to a detected toner density and therefore create an optimal toner density and, accordingly, better image quality.

Conclusion

26. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RUTH N. LABOMBARD whose telephone number is (571) 272-6430. The examiner can normally be reached on Monday - Friday, 7:30am - 4:00pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Gray can be reached on (571) 272-2119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/David M Gray/
Supervisory Patent Examiner,
Art Unit 2852

RNL